

in our examples. I have not been able to procure specimens from Eastern Europe to ascertain whether this variation indicates the eastern race. We never met with the Redwing, and only once or twice with the Fieldfare (*Turdus pilaris*) in winter. I have a specimen shot in February close to Jerusalem. *Turdus musicus* often occurred in winter in the higher grounds; and I occasionally noticed it in the wooded parts of northern Galilee in spring, but we did not find its nest. *Turdus merula*, on the contrary, was scattered in every part of the country throughout the year, remaining to breed even in the sultry Ghor. It was nowhere abundant, and was one of the most retiring and shy of the inhabitants of the thickets. It is precisely identical with our Blackbird. We never found the Mistletoe-Thrush, though it must certainly exist in the Lebanon, and probably in Gilead, since it remains in the Tunisian Atlas and in Asia Minor throughout the year.

✓ The Bulbul of Palestine (*Ixus xanthopygius*, H. & Ehr.) I have already described (Ibis, 1865, p. 81), as well as the only representative of the Timaline group, *Crateropus chalybeius*, Bp. I may add to my description of the former that the specimens from the Jordan valley are at all seasons of the year much lighter in colour than those from the upper country, and that this distinction holds good without exception in a series of over thirty specimens.

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XXV.—*Ornithological Notes from Formosa*. By ROBERT SWINHOE, Her Majesty's Consul at Taiwan, F.Z.S., &c.

(Plate IX.)

✓ THE last Number of the expired series of 'The Ibis' having at length reached me, I have given it my attention. The "Notes on the Birds of Siam," by Sir Robert Schomburgk, deserve a few comments. Under the head of *Alcedo bengalensis*, the remarkable "white-spotted species of the *Halcyon* family" is, without doubt, *Ceryle rudis*, of wide distribution. I would suggest that ✓ Sir Robert's "*Turtur suratensis*" should be rather *T. tigrinus* of ✓ Temminck, represented in China by *T. chinensis*.

✓ The observations on the habits of *Sturnopastor nigricollis* I

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J. Wolf lith.

M & N. Hanhart, imp.

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can confirm, excepting the fact of its breeding "in the hollows of the trunks of trees." All the nests that I have come across in China of this species have been built in loose circular form, large and domed, and placed among the topmost twigs of high trees. But perhaps this bird, like *Acridotheres cristatellus* (L.), sometimes adopts one style and at other times another, consulting its own taste and necessity. The Siamese representative of *A. cristatellus*, my *A. siamensis* (P. Z. S. 1863, p. 45), Sir Robert does not mention.

✓ The Crow Pheasant, *Centropus philippensis*, is said to be "not larger than our Cuckoos." Surely *Centropus affinis* (Horsf.) is meant. Both species are, however, known to inhabit Siam. Their breeding-habits have been observed and already described by other travellers.

✓ I question whether the Siamese *Copsychus* be not rather *C. mindanensis* than *C. saularis*. If it be so, what is the range of the former species?

✓ *Estrela amandava* is brought in large numbers from the Straits to China as a cage-bird.

✓ The description given of *Hydrophasianus sinensis* applies to *Metopidius indicus* rather than to the first-named bird.

On the 7th of October, while returning from the Snipe-marshes near Takow, I got a close view of a *Locustella*, which I think was my *L. minuta*, before noted in South China. Some way up a hill I heard the cry of Kestrels, and seeing a wing flapping, I thought it was one in the jaws of some beast of prey. I clambered up the hill, and had almost reached the spot, when up flew two Kestrels from each other's embrace. They were immature birds; but as I had no gun with me I was obliged to let them fly away in peace. The spot where they had been fighting was stained with blood and covered with feathers. I continued my ramble, and from a rock again put up one of them. He looked "seedy," and I suspect was one of the combatants.

October 14.—A party of Night-Herons (*Nycticorax griseus*) flew overhead just as it was getting dark. They hovered over the confines of the sea, and then turned back. Their flight is

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slow and somewhat hovering, and they observe no order or figure.

October 22.—A friend returned from a shooting-excursion this afternoon. The Snipes bagged were *Gallinago media* and *G. stenura*, in equal numbers, and one very large specimen of *G. solitaria*. This last bird was of a richer ochreous-brown than usual. It was a female, and on dissection was found to possess the peculiar cæcal appendage before referred to (Ibis, 1865, p. 231). Several long thin white tapeworms were wound round its intestines, the longest worm measuring two inches*. The stomach was more muscular than in the Common Snipe, and contained a mass of green fibrous matter, apparently *Algæ*. Can the use of this substance be to aid digestion? The *cæca* were minute, as in *G. stenura*, *G. media* having them long. Among the other water-birds procured, the most noteworthy were two examples of *Totanus fuscus* and one of *T. affinis*. The latter is new to the Formosan list, but I have procured it before at Amoy. Mr. Blyth and others had some doubts as to *T. affinis* being a good species, but I am convinced of its validity. My friend observed several pairs of this bird; and as I know it to be amongst the earliest arrivals near Amoy, it is not improbable that a few breed in low latitudes in China.

TOTANUS AFFINIS, Horsf. Bill olive-green at basal half, black at tip. Inside of mouth dusky flesh-colour. Iris deep brown. Ear-coverts behind the occipital line of the eye, and large for the size of the head. Legs and toes rich ochreous-olive, with black nails. Tail of twelve feathers, the two central about .2 inch the longest, the next .1 less, the rest equal. It was a female, on dissection showing a cluster of minute eggs. Its stomach was heart-shaped, Snipe-like, and not very muscular, with a black lining, and containing one minute *Paludina* with shell entire, besides remains of freshwater insects, together with algæ-like fibres. Its whole body was imbedded in fat. I examined carefully its intestines, but could discover no *cæca* of any kind.

* [Some specimens sent home by our correspondent have been kindly identified for us by Dr. Cobbold as *Tænia gallinaginis*, Rudolphi, Synops. Entoz. p. 173.—ED.]

Both specimens of *Totanus fuscus* were females. Their stomachs were also Snipe-like, but more muscular than that of the foregoing. They were filled with remains of small crustaceans. The cæcal appendage was prominent.

Throughout October *Phylloscopus sylvicultrix* was abundant, as also *Lanius lucionensis*. Some of the latter continue on well into December. In October *Egretta alba* shows himself in our marshes, but he has then assumed his yellow bill, and is shorn of his dorsal and pectoral plumes. One was winged the other day; and I have him now in keeping, as I wish to note the vernal change of colour in his bill, and the dawning of his nuptial livery.

As I before mentioned [*anteà*, p. 126], I received in September, from the mountains near Tamsuy, a collection of birds which had been shot in August, but I was not able to attend to them till November. The following are the notes I made.

PASSER RUSSATUS, T. & S., Faun. Japon. The first female of this species yet procured in Formosa. A good deal like the hen of *P. domesticus*, but smaller. Its upper parts are, however, more tinted with chestnut; and it has other peculiarities, which are well described in the 'Fauna Japonica.' Its bill is light brown on the upper mandible, and yellow ochre on the lower.

AIX GALERICULATA (Mandarin-Duck). A pair—both in the ugly plumage of the female, showing that after the breeding-season the male of this Duck also assumes the female garb. ♂, length 13·5, wing 8·9. ♀, length 15, wing 8·7. Instead of the dull brown quills touched with grey that mark the female wing, the male has the exposed parts of the quills fine dark green with pearl-white margins. The rest of his plumage is lighter and more glossy. His spectacle-streak is more defined, and on his forehead are still a few green feathers. The bills and legs of both male and female are too dry to admit of their colours being distinguished. In an account of the Birds and Beasts of Formosa given in the Chinese statistics of the Taiwan territory [*vide suprà*, p. 207], the Mandarin-Duck is admitted as a species indigenous to the island. This I was very loth to believe, as, knowing it to be partial to inland waters, I could not understand how it could make the migration to this island every winter.

The evidence now before me tends to show that it is a resident on the inland waters of Formosa. This fact I could not at first reconcile with the notion that in China it was a migrant, repairing to the high latitudes of Amoorland to breed. The Chinese, however, declare that such is not the case with all individuals of this species, for many pairs are known to breed regularly in the lakes of Central China. The same habits obtain in its congener, the *Aix sponsa* of America. The Summer-Duck is said to be a resident and to breed throughout the United States, even in the most southerly of them, as also in the West India islands. Those, then, that belong, so to speak, to the north would be driven down by the freezing of the waters in their accustomed haunts, and they merely shift southward in quest of open water wherein they may seek their daily food. This explains one part of the case in point; the other, with regard to an inland Duck finding its way to an island and settling down therein, I leave open to theorizers.

Megalæma nuchalis, Gould. The immature bird has no tinge of blue on the wings. Its back is dull green and devoid of the yellow wash; and the fire-tipped feathers of the back of the neck are wanting. The yellow on the throat is paler, and the large bright red spot of the lower neck is represented by only a few light specks. Bill lighter and browner, with an ochreous edge to the base of the lower mandibles. This species belongs to the subgenus *Cyanops*.

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Dendrocitta sinensis, var. *formosæ*. In the young bird the blue grey of the head, hind neck, and rump is much sullied and mixed with the liver-brown colour of the back. Several of the tertiary quills are tipped with the same; and the smoke-grey of the under neck and breast is also strongly tinged with liver-brown. The tail is ashy grey for the greater part of its length.

Corvus colonorum. An adult. Agrees well with the characters already given of the species.

Urocissa cærulea. Full-grown young. Head and neck a dull blackish, *a few of the occipital feathers being tipped with violet*. (Darwin again!) Upper parts much as in the adult, but duller and swamped with smoke-grey on the back and rump. White tips to wings and tail washed with buff. Under parts smoke-

grey. Basal half of the *remiges* on the underwing edged with salmon-buff. The stems of the *remiges* are of the same colour. Bill nearly as bright red as in the adult. Legs and toes well washed with black.

Psaropholus ardens. First full plumage. Bill brownish, tinged with blue. Legs leaden-blue. Head and hind neck dull black; throat and under neck the same, freckled with white. Axillaries and *tibiæ* brownish black. Belly whitish, smeared and streaked with brown, more or less blackish. Wing deep brown, quills narrowly edged, paler. Wing-coverts broadly tipped with reddish-buff, which colour margins the first tertiaries. Some of the scapulars tipped with same, and in the nestling these spots probably extended to the dorsals also. They still occur here and there on the back of the full-fledged bird; but the red is crowding them out, and has already become crimson on the rump and tail. The tail, however, is still washed with black. In the fledgeling stage this bird must be very Turdine, more so than the Yellow Orioles.

On the 7th of November I received a few birds from Consul Caine at Swatow. They were the following:—*Pelecanus philippensis*, fine mature male with curled occipital crest; *Nycticorax griseus*, in immature or first plumage; *Gallicrex cristata*, male in young plumage, distinguishable from the female by its redder tinge and larger size; *Butorides javanica*, mature male; and *Tchitrea principalis*, immature, with reddish wings and tail, and dusky bill and legs. The Pelican received this time is the only mature specimen of this species that I have yet procured. I have sent it home for identification.

My account of our Formosan *Turnix rostrata* will long ere this have reached you [Ibis, 1865, p. 543]. You will therein learn the fact of my having discovered the bird in attendance upon its young, that the only parent so engaged was the male (found so to be on dissection); and you will read the remarks I was led to make on this curious occurrence. The third volume of Jerdon's 'Birds of India' has just reached me; and turning up *T. taigoor*, Sykes, I find (p. 597) the following:—"The females are said by the natives to desert their eggs, and to associate together in flocks; and the males are said to be employed in

hatching the eggs ; but I can neither confirm nor reject this from my own observations." It is easier to make observations on the nesting of birds in Europe than in tropical countries ; so you had better set your Andalusian correspondents to scent after the species of this group that occurs within their region. It is likely enough that this advantage over the male of which the human fair is possessed only in leap-year, will be found to be annually enjoyed by their more fortunate sisters among certain birds ; and the right of contending for their husbands would then, according to Mr. Darwin's theory of sexual selection, be the cause of their developing a handsomer plumage than their mates. I have an idea that among the *Rhynchææ* the duties of incubation also devolve upon the male bird ; for the females are found knocking about together in flocks before the close of summer, at a season when more matronly birds prefer looking after their families to gadding. I have not, however, been fortunate enough to fall in with the nest of our representative of this very interesting genus ; and Dr. Jerdon makes no remark on the subject.

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59 I was in Amoy the last few days of November. I found in a friend's aviary a bird that has not occurred to me in South China before. It is a *Porphyrio*, smaller than *P. poliocephalus* of India, and certainly not that species. It may be *P. smaragdinus*, Temm., of the Straits. It was in too bad plumage for me to take a note of it worth having. My friend told me that he got it from a Chinese rustic who was playing with it, and who said that it had been taken in that neighbourhood. I was told that at night its plumage displayed a phosphorescence !

At the Pescadores, as is usual, I was delayed both going and coming. With the exception of a Peregrine Falcon and two or three Gulls, I saw no wild birds there. In the chief town, Makung, several pairs of the pretty White Dove were brought to me for sale. As I have before stated, these Doves are said to be reminiscences of the former Dutch possession of these islands, and to have been introduced from Java. They are now bred by the Chinese in confinement, and are much prized. They seem to me to be simply albinos of the Domestic Dove, which is usually referred to *Turtur risorius*.

On the 17th of December, while riding down to this port

from Taiwanfoo, I was quietly walking my horse through the town of Ar-kongteem, when I spied, in a cage hanging up at a shop-door, a bird new to me. I stopped, and tried to induce the shopman to sell it to me, but in vain. The next day I sent one of my hunters to bargain for it. He succeeded in getting it, though at no small figure. The bird was provided by its former master with a small pot of water, and another of fried rice, the grains of which latter it picked up individually with its bill and munched after the manner of Finches. Suspended from the roof of the cage, over a high perch, hung a dome of soft cock's hackles shaped like a large shuttle-cock inverted. Under the cover of this the bird would creep to shelter itself from the night's cold—a pretty and cheap invention, which, I think, might be recommended to lovers of the more tender birds at home. The little captive was extremely lively, continuing to hop about incessantly, and clinging to the top bars Titmouse-fashion. It uttered repeatedly a pleasant series of notes, and only occasionally a single note. When frightened, or wanting to attract attention, it would give forth a suppressed “chur.” It was very tame, coming to the side of the cage when any one approached it, and pecking at the protruded tongue. Its Chinese master had reared it from the nest; with me it lived only a few days; but I could not ascertain the cause of death. The specimen was a female. A few days later my hunter succeeded in getting me a male. This little gem was housed in a similar manner to the last, but was provided, in addition, with a small bowl of water, in which he delighted to bathe both morning and evening. The food supplied was of two sorts, pounded millet-seed in one cup, and a kind of “German paste,” made of pounded rice and the yolk of egg, in another. He fed well, revelled in the sun, and roosted under his hackled roof apparently quite content. His note was more monosyllabic than that of the female, and he moved about more sedately. If one approached the cage he would begin shaking and quivering his wings, chirruping, and sidling slowly towards the person. If the face were put down to the side of the cage, his agitation and the tremor of his wings would increase; and he would keep on this fun as long as the face continued near. But if the finger were

thrust through the bars he would fly at it with great fury, pecking and biting very hard, and charging again and again at it, each time with redoubled onslaught. He was always ready for a fight, and seemed by his manner to challenge it. He made no difference between stranger and acquaintance; but the presence of several people cowed him, and he became shy. He was altogether the most pugnacious little bird I have ever seen, and in the way he went about his battles very similar in style to *Leucodiophron chinense* and *L. taivanum*. Before I had time to try him with insects, or, indeed, to learn much further about him, to my great annoyance I found him also cold and stiff at the bottom of the cage. The Chinese must have a secret for keeping them alive which I have not yet succeeded in possessing. In plumage and other respects the male and female seem in every way similar. I should like to introduce the species as

*SUTHORA BULOMACHUS**, sp. nov. (Plate IX.)

Supra fusco-olivacea; corona tectricibusque partim alarum, cum remigum marginibus, rufis; cauda alisque brunneis; rectricibus transversim vix striatis, earum externis pogoniis olivaceis: subtus albida; lateribus, tibiis crissoque olivaceis; axillaribus lacteis; pectore mentoque roseo suffusis et leviter fusco striatis; rostro brevi (fere *Pyrrhulaceo*) pedibusque pallide plumbeis.

Long. 5·3, alæ 2, caudæ 2·4 poll.

Bill light brownish-leadен, with a tinge of pale purple horn-colour on tip and edges. Irides rich brown. Legs and claws bright purplish leaden-brown, with dingy yellowish soles; nails pale horn-colour, purplish along their ridges. Head brick-red. Upper parts brownish-olive. Tail hair-brown, indistinctly barred on the rectrices, and edged exteriorly with olive-brown. Remiges a deeper hair-brown, broadly margined with brick-red, so as to make the wing look red for its greater part when closed. Wing-coverts tinged with reddish. Axilla pale cream-colour; inner edge and most of quills nearly white, showing the underwing for the most part white. Breast and under neck washed with pale silvery rose-colour, with a few light streaks and freckles. Underparts dingy cream-colour; flanks, thighs, and vent olivaceous.

* *βουλόμενος, qui cupit pugnare.*

From Dr. Jerdon's 'Birds of India,' (ii. p. 7) I am inclined to think that this species is a second of Mr. Blyth's genus *Chleuasicus*, and in style of colouring is even more nearly allied to *Paradoxornis ruficeps*, Blyth, than is the already-described species *C. ruficeps*, Blyth. The bill has a few light bristles at the rictus. The feathers of the head are rounded and thick-set, the ear is large and oval, its rostral line within the occipital line of the eye. General feathers of plumage much as in *Prinia*. The tail, too, is very similar to those of members of that genus, except that it numbers twelve rectrices, and is usually carried cleft into two halves. The first lateral tail-quill is 1.25 inch shorter than the longest median quills, and is a good deal narrower. The tail-quills are much graduated, and broader as they approach the middle. Wing rounded and a good deal as in *Prinia*; first quill short and narrow; the second and third graduating; the fourth only .1 inch shorter than the fifth, which is only the least bit longer than the sixth and seventh; thence the decrease onwards is very gradual. Legs thick and heavy for so small a bird; hind toe and claw disproportionately large as compared with those in front. Tarsi about .6 inch; front claws cultrated at sides, hind claw nearly smooth; outer toe a little longer than inner. The foot is quite that of a *Timaliine* bird, and to that section it doubtless belongs.

Dissection of female.—*Trachæa* with the ring above the *bronchi* strongly protruding and muscular. *Œsophagus* above the *thorax* dilatable; the *proventriculus* somewhat long and granulated; stomach large and circular, about half an inch in diameter, with very strong lateral tendons; *epithelium* yellow, adnate, deeply corrugated, and containing siliceous grits; intestines short and thick; cæca not perceptible. Ribs six pairs on each side. Sternum short, broad, and rounded, with long coracoids and clavicles.

The Chinese of the coast are not acquainted with the species; but the Chinese of the interior call it "*Bang-taou*" (*lit.* Net-gamble), and prize it very highly for its pugnacious propensities. Its young are procured from the hills, reared by hand, and nurtured with great care, and when mature they are fought for wagers like the *Hwameis*, the Quail, and *Copsychus saularis*.

This bird is also well known to the Indians of the interior, and was no doubt originally procured from them by the Chinese. The Chinese name for it is, I suspect, only a version of the name it goes by among some of the hill-tribes. To the aborigines, however, it is more than a mere fighting pet. It is their bird of omen, and apparently the ruler of all their actions. In the "Dictionary of the Favorlang Dialect of the Formosan Language," by Gilbertus Happart, 1650 (translated by W. H. Medhurst, 1840), it is mentioned as "*Adam*, a certain small bird, less than a Sparrow; variegated with a long tail; from whose cry future good or bad fortune may be presumed; if it cries out twice or four times, it betokens misfortune; but if once, or thrice, or five times, then good success; if anything above this, it intimates a still greater blessing, according to the number of cries." Again, in Ogilby's '*Atlas Chinensis*' (vol. ii.), in some notes afforded by "David Wright, a Scotsman," who spent some years in Formosa during the occupation of the Dutch, it is stated, with reference to the mode of warfare among the Formosans, that "Before they march into the field they superstitiously observe the dreams which they had the night preceding, and augur from the singing and flying of a certain small bird called *Aidak*. If this bird meets them flying with a worm in his bill, they take it for an infallible sign that they shall conquer their enemies. But if the bird flies from them, or pass by them, they are so much disheartened by the ill-omen that they return home, and will not engage until they have better signs." Again, on the subject of the chase, "Before they go out they tell to one another the dreams they had the preceding night, and also neglect not augurial observations; insomuch that if the bird '*Aidak*' meet them, they count it a good omen. But if it flies either on the right or left side of them, they put off the sport till some other time."

Most nations have their emblematic bird, beast, or reptile; and I now introduce to the readers of '*The Ibis*' the emblematic bird of Formosa—small, it is true, but well typifying a land of which Ogilby remarks "that each town being a republic, they still have wars and are at difference one with another, town against town, village against village, insomuch that peace never

set foot in that isle." The Chinese rule has not introduced a better order of things, but has rather most unhappily thrown in a more powerful element to provoke dissension and mutual extermination among the ill-fated heirs to the soil. If Formosa is ever destined to be a jewel in some European crown, our little *Bulomachus* may some day find himself emblazoned on the armorial bearings of a well-governed colony. Meanwhile I cannot do better than let his pretty portrait adorn the pages of 'The Ibis.' I send you the better of the two skins I possess, and I am sure Mr. Wolf will do the species justice. Its claims on the naturalist, and on the politician equally, demand for it a first place.

Takow, S.W. Formosa,
30 December, 1865.

In comparing my Notes already published in 'The Ibis' with my Journal for 1864 at Tamsuy, I find some jottings, which are of more or less importance, omitted in the former; and as I make that esteemed periodical the storehouse for my ornithological "ramblings," I must ask indulgence to have them now inserted.

"*Garrulax pæcilorhynchus*, Gould. 1 March, 1864. Bare skin between the eye and ear fine French-grey. Legs light leaden-grey, with yellowish sole-pads. Claws flesh-colour, greyish on the basal half." By the way, I see from Bonaparte's 'Conspectus' (i. p. 373) and Jerdon's 'Birds of India' (ii. p. 66), that there is already a *Timalia pæcilorhyncha*, Lafresnaye, which has been identified with *Layardia subrufa* (Jerdon). It will perhaps be necessary for Mr. Gould to give our bird some other specific name.

"*Urocissa cærulea*, Gould. I was very anxious to get a live example of the species home to the Zoological Society's Gardens. My hunter had nine captured in the hills with a noose-trap. He unfortunately boxed them all up together in one basket, and fed them on boiled rice. Five were dead before the basket reached me. I was having cages made for them, and in the mean time left them together. A loud, continued screeching took me quickly to the basket. One bird was standing on the top of another and hammering him most terribly with his bill. I

took the hint, and gave them thereafter a free supply of raw meat. Three survived and did well, each in a separate cage. They fed voraciously on flesh, even on the bodies of their comrades. All kinds of insect-life seemed acceptable to them, especially cockroaches. I had therefore great hopes of getting one home to England alive. I sent my finest sample to Hong Kong; but before a chance for shipment occurred he died of ophthalmia and vertigo. Their irides were a light pearly king's-yellow, and their pupils were unusually large. They kept up a continued chattering during the day, which sounded like the twittering of several Finches together. After a while they became tame; and one in particular used to ruffle his feathers and sing in a subdued tone (as if to himself) for a greater part of the day. If the finger were held to him, he would stand high on his legs, divide the feathers of his breast, half open his wings, throw back his head, and, uttering a warning aspiration, stand ready to attack the intrusion."

This species does not appear so common in the southern mountains. I will get my hunters here to try for live birds. It would be a handsome set-off to the two species of this noble group already in the Gardens.

✓ " *Oreocincl* *hancii*, Swinhoe (Ibis, 1863, p. 275), 15 March, 1864. The wing of this specimen measures 6·5 inches, tail 4·25 inches. It is rather smaller than the one I procured before, and may be a female, as that was a male. It seems much more copiously lunulated on the breast with black."

" *SPILORNIS HOYA*, sp. nov.

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" A pair bought at Tamsuy, 29 March, 1864. Differs from *S. cheela* by its smaller size, by its crest being composed of shorter and smaller feathers, by its shorter and more wedged tail with the central transverse band not half the width it is in that species, and by its wing- and tail-coverts being profusely spotted with white. It would appear to be intermediate to *S. cheela* and *S. bido*,—*S. holospilus* of the Philippines, with which it ought to have the closest affinities, being one-third smaller than *S. bido*.

" ♂. Length 27 inches; wing 18·5, first quill 4·3, second 1·5, third ·2 shorter than the fourth, which is the longest in the

wing; the first four quills are deeply indented on their inner web, the first six narrow towards their tips; the rest become more obtusely ended as the secondaries are approached. Tail about 13 inches long, composed of twelve broad feathers slightly narrowing to their ends and graduated, the outermost being 1.25 inch shorter than the middle ones." (In a more adult specimen, procured in January 1866, from the southern mountains, the difference is about 1.6.) "Tarsus 4.25. Middle toe 2.2, its claw 1.1; inner toe 1.4, its claw 1.2; outer toe 1.5, its claw .8; hind toe 1.2, its claw 1.2. Tarsi covered with rather large hexagonal scales, largest along shank; toes with smaller imperfect hexagons, larger on upper surface, and towards their tips transforming into transverse scutes. Legs dingy yellow, brighter on the toes; claws black. Bill light bluish horn-colour, bluer at the base and browner towards tip of upper mandibles. Cere and rictus bright yellow, paler towards and round the eye. Irides bright yellow. Coronal and occipital crest-feathers white, tipped with black. General plumage hair-brown, blacker on the cheeks, and brighter on the underparts. Wings banded and clouded with black and greyish-brown. Quills tipped with white; the wing- and tail-coverts spotted with the same. On the body reflexions of purple and bronze. Tail crossed by a double bar of light ochreous brown clouded with brown, narrowly tipped also with same." (In the more mature specimen above mentioned the narrow middle bar is the only one that remains complete.) "Under wing banded with clouded white. Under tail black, banded with clouded ochre." (The maturer bird shows the one band nearly white, with white tips to the under tail; the more basal band hidden beneath the under tail-coverts is nearly obsolete.) "Axillaries and lower parts yellowish-brown, mottled, chiefly on the latter, with black, and ocellated, thickly and more purely on the former, with white edged with black."

"♀ with a shorter and more worn bill. Has a lighter plumage. Her wing is worn, and has fewer spots. The basal band of the tail has nearly disappeared, and the central band approaches nearer the roots of the tail. Her under wings have wider bands of white. She appears to be an older bird than the male. Length 30 inches, tail 13, tarsi 4.5.

“Sternum Aquiline, with convex posterior edge, and one oval hole on each side; scapulars broad.”

Mr. Gurney must have long ago received the pair from Tam-suy together with my descriptions, but I have not yet learned his opinion as to the validity of the species. I have followed the custom prevailing in this genus of naming the species after its local name.

Besides the specimen procured near here (Takow) in January 1866, I received in December 1865 an immature bird, also from the southern mountains. I now give the notes I have made on this.

“*Spilornis hoyi*. Immature, from the Fungshan Mountains, procured November 1865. Length 28·5 inches; wing 19·3; tail 12·25; tarsus 4·4, feathered down the front for $1\frac{1}{4}$; middle toe 1·4, its claw ·9; hind toe 1·1, its claw ·1; outer toe smaller than inner, with small claw; inner toe robust, with claw as large as that on hind toe. Legs yellow, claws black. Crown and occiput white, tipped with blackish-brown; the occipital plumes much longer than in the adult. Moustache, eyelid, and auriculars blackish-brown. Tail with two brown cream-mottled cross bands about an inch in width, and indications of a third bar near its base hidden by the tail-coverts; rectrices tipped with cream-colour. Under tail black, the bars showing through brownish white; near its roots the under tail is barred and mottled with whitish. Under parts dingy cream-colour, streaked on the breast with blackish-brown, and more faintly on the flanks and abdomen. The vent and tibials washed with buff, and prettily barred with buff-brown shaded with black. Axillaries white, varied with reddish-brown. A good deal of white occurs on the underwing. On the primary and tertiary under-coverts the peculiar *Spilornis*-style of spots are showing themselves. Upper parts deep hair-brown, shot with purplish-pink; the feathers on their concealed halves whitey-brown, with more or less pure white. White margins to the higher tail-coverts, and brown to those in immediate proximity with the tail. All the small and large wing-feathers are more or less tipped with white, and some of the coverts are a good deal marked with it. Quills hair-brown, banded with blackish-brown, the latter showing through on the

under wing, while in the former there appears whitish brown ; fourth quill longest, first 4·3 inches shorter than it ; first four quills pointed at tip and narrowed. The light bands on the basal half of the quills give place to more or less white on the inner webs, which extends more towards the tips on the tertials. This white shows through, and gives the whiteness to the under-wing. The plumage in this stage is very Osprey-like, especially so in the aspect of the head. The Chinese insist upon its being a large kind of *He-pew* (Fish Tiger), their name for the common Osprey (*Pandion haliaetus*)."

"*Scops japonicus*, Schlegel. Procured at Tamsuy, 29 March, 1864. This is the peculiar rufous form, known from India as the *Scops sunia*, Hodgs. Wing 5·8 inches ; four first quills somewhat indented on inner web, fifth the longest ; tail of twelve soft feathers, 3·5 inches long.

"*Ampelis phœnicoptera* (Temminck), ♀. Shot at Tamsuy, 17 April, 1864. Length 7·5 inches ; wing 4·3 ; first quill slightly shorter than the second, which is the longest in the wing ; tail of twelve feathers, nearly equal, 2·4 inches in length. Bill black. Iris blood-red. Inside of mouth flesh-coloured, slightly ochreous. Mouth broad ; tongue rather broadly sagittate, bifid at the tip. The black runs round the bill, and passes the eye in a broad facial band, borders the conical crest, and makes a large spot on the chin. Feathers at base of lower mandible at their roots white, their tips burnt-sienna ; they form a broad side-fringe to the black chin-spot. Forehead also burnt-sienna, blending into the light hue of the crest. Legs and claws black, flesh-coloured on their sides. Proved to be a female by dissection ; very thin ; a few seeds of a species of *Rubus* in its gizzard.

"*Ninox japonicus* (Schlegel), ♀. Shot at Tamsuy, 17 April, 1864. Length 10·8 inches ; wing 8·5 ; first quill 1·5 shorter than the second, which is ·7 shorter than the third, which is ·1 shorter than the fourth, the longest in the wing ; first four quills deeply indented on edge of inner web ; tail of twelve feathers, slightly graduated, 4·4 inches, the outer ones being about 2·5 inches shorter than the middle ones. Bill blackish, with the culmen and greater part of lower mandible light green-

ish-yellow. Inside of mouth bluish flesh-colour; apical half of tongue horny and of a pale yellowish-blue. Iris deep yellow. Naked feet brightorange-yellow or golden, and covered with black bristles; claws black, paler at their bases. Proved to be a female by dissection; fat and greasy. Stomach full of remains of *Melolonthæ* and other insects, chiefly *Coleoptera*.

“*Euplocamus swinhoii*, Gould. I have seen many males with a plumage intermediate to that of the adult of their own sex and that of the females. This plumage is carried through the winter; but it varies in its resemblance to the one sex or the other. I thought at first that such birds were melanite varieties, especially as the Chinese distinguished them by a distinct name, *Aw-bay-kak* (black-tailed male); but I consider now that they are only young males in the transition-plumage, which they carry till the next vernal moult. In this respect they would appear to differ from the true *Phasiani*, which burst full-blown into the adult costume at their first moult in the autumn after they appear in the world.”

Now I will drop Tamsuy and the past and speak of this vicinity and of my late acquisitions. From the southern mountains I received, in December 1865, a new species of Titmouse of the *Parus major*, L., type, and closely allied to *Parus monticolus*, Vigors, of the Himalayas. It is a very lovely species.

PARUS INSUPERATUS, sp. nov.

Similis *P. monticolo*, sed minor; uropygio cinereo nec dorso concolore; axillaribus, tibiis crissoque albis, nigro variis; collo sub gutta alba nuchali postice flavo.

Long. tot. 4.5, alæ 2.6, caudæ 1.8 poll.

Habitat in montibus Formosæ meridionalibus.

Head, sides of neck extending to back, under neck, and median line of under body blue-black, with purple reflections on the three first. Cheeks, nuchal spot, broad tips to primary coverts, axillaries, half of under wing, outer side of tibiæ, and broad tips to crissum white. Below the nape-spot and under parts fine bright yellow. Back and scapulars bright yellowish-green. Rump and flanks bluish-cinereous. Primaries blackish brown, fringed near the base with French-blue, and tipwards limned with white. Secondaries and tertiaries blacker, edged with blue

and tipped with pearly white; the latter more conspicuously tipped. Shoulder-coverts bluish-grey; the rest of the coverts black, broadly margined with pearly-white and grey. Axillaries and tibials white, varied with black. Basal portion of vent-feathers black. Tail greyish-black, broadly edged with French-blue and tipped with white, the white increasing on the laterals; on the outermost it covers the apical third of the inner and two-thirds of outer web. Bill black. Legs and claws deep plumbeous. Tail somewhat graduated, having the outer feathers .3 inch shorter than the middle ones. Fourth, fifth, and sixth quills nearly equal, and longest in the wing. Winglet deep brown, edged with greyish blue, and without any white.

The next novelty I have to describe was brought to me from the hills in January of this year. I find it to be one of my oldest Formosan acquaintances, having met with it on the hills at Hongshan below Tamsuy so long ago as March 1856, when on an adventurous visit to this island in a Portuguese Lorch. I then found the little fellow's nest, well observing the bird to be like a *Zosterops* with a red crown. In later years, as I did not meet with the bird again, I tried to reconcile it with one of the species I had succeeded in procuring; for, be it known, the owner of the cup-shaped nest with pretty blue eggs proved himself too lively and cautious for my slow marksmanship. I pitched upon the *Calamoherbe minuta*, mihi, as being somewhat of the same size and having reddish on the crown. I felt so sure of this identification being correct, that in my paper on Formosan ornithology (Ibis, 1863, p. 306) I assigned the nest and eggs of my doubtful acquaintance without a comment to said known species. When my hunter brought me the right bird the other day, one glance sufficed to recall all, and in one leap before my vision appeared the brush-clad hills of Hongshan as they appeared ten years ago; I saw the deep cup-shaped nest with the small Redstart-like eggs, and I heard the short rattling chirp of the small "Redcrown" as I in vain dodged after him with my gun. I have no further doubts on the subject; and the whole clause, therefore, beginning from "It suspends" to "moves away," instead of referring to *Calamoherbe minuta*, will

be known henceforth to refer to my long-lost acquaintance, which I now beg leave to introduce as

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STACHYRHIS PRÆCOGNITUS, sp. nov.

Olivaceus, cauda alisque fuscioribus; coronæ plumis crispis, semierectis, rufis; gula tenuiter striata et cum pectore ventrisque medio sordide aureis; carpis axillaribusque flavescentialbis; rostro pedibusque plumbeis.

Long. tot. 4·1, alæ 2·2, caudæ 1·6, tarsi ·7 poll.

Bill plumbeous, very like that of *Zosterops simplex*, but longer. Legs Timaliine, long and strong, light plumbeous-brown, with a wash of yellow, especially on the nails. Feathers of the crown somewhat stiff, semierect, and dull flammeous, glistening in the light. Eyelid black. Iris reddish hazel. Above olivaceous, browner on the wings and tail, which have their stems and inner webs deeper-coloured; the two central rectrices the same on both webs, and all the tail-feathers faintly barred. Under parts dingy golden, olivaceous on all but the throat, breast, and middle of belly. Axillaries white, tinged with yellow, especially on the carpal edge. The inner web of many of the quills more or less edged with white tinged with yellow, making a partly whitish under-wing. Vibrissæ few at gape, but numerous and black on chin. Throat with a few black streaks. Claws curved, blunt, and laterally cultrated; outer toe longer than inner; hind toe and claw large. The third and onward quills broad; first to fourth graduated; fifth to seventh nearly equal and longest; first shorter than longest, about ·8. Rectrices twelve in number, broad and graduated, outermost about ·4 inch shorter than the middle ones. General feathers soft and fluffy. Bill nearly ·5 inch, straight and Zosteropine. In the striation of its throat, and in many other respects, this species seems to bear relation to *Mixornis rubicapillus*, Tickell; but the bill of that is more Turdine. Its closest ally is *Stachyrhis chrysea*, Hodgson (Jerdon, 'Birds of India,' ii. p. 23), with which in company it might be ranked under a distinct genus, and not associated with the other species of *Stachyrhis* as at present constituted; but where the new genus should stand is not so easily settled. This species certainly has affinities with *Myzornis*, *Herpornis*, *Zosterops*, and *Iora*; but I

shall content myself, for the present, in leaving it along with *S. chrysea*, to glory as a troublesome and aberrant form among the Babbling Thrushes; for, barring its head, the rest of its build, its habits, and the colour of its eggs are in accordance with those of *Garrulax*, and point to a kinship, however distant, with that multiform group.

On the 5th of June, 1865, I received some male Green Pigeons from the Fungshan Mountains (Takow is in the Fungshan district). I thought I had got in them the male of my *Treron formosæ*, which species I had created on a single female procured at Taiwan in 1860 (Ibis, 1863, p. 396). I described the bird in one of my late papers [*anteà*, p. 122], noting that the species was not a true *Treron*, but, from its long, broad, wedge-shaped tail, a *Sphenocercus*. I left my single type-specimen in England; but I have now received a male of the true *Treron formosæ* from the Kia-e district, and several of both sexes of the same from the Fungshan district. It is incumbent on me therefore to correct my hasty error, and to describe now the true *Treron formosæ* male. The *Sphenocercus* I should like to stand as *S. sororius*, from its close affinity to *S. sieboldi*, Temminck, of Japan, from which, on reading the description of that bird in the 'Fauna Japonica,' I find it to differ in the following characters:—Its upper back is only tinged with grey, instead of being deep grey; its greater wing-coverts and tertiaries are edged with pale primrose; but its chief difference is in the blackish-grey of its lateral tail-feathers. The size of the two species would seem to run very close; and I would hesitate to make a distinct species of our bird without actual comparison of specimens, were it not a known fact that species of this group usually enjoy a very limited range.

SPHENOCERCUS SORORIUS, mihi ["*S. formosæ* ♂," Ibis, 1866, p. 122, nec *Treron formosæ*, Swinh. op. cit. 1863, p. 396], ♀, is grass-green on the forehead and under neck. Her upper parts are of a duller and browner green, and devoid of the blue-grey on the back and maroon-chestnut patch on shoulders and wing-coverts. The third quill of this species is sinuated on the edge of the inner web, as in most *Treronine* Pigeons. Dr. Jerdon, however, says that such is not the case with the Indian

members of the genus *Sphenocercus*. The female is of much the same stature as the male, but not quite so robust, and has the wing about half an inch shorter.

✓ *Treron formosæ* ♂ (vera). Upper parts olive-green, brighter on the rump and tail, as in the female (in 'Ibis,' 1863, p. 396, "yellow on the head and rump" is a misprint for "yellower on the head and rump"). Neck, upper back, face, breast, and belly light grass-green, greyest on the second of these, and yellowest on the face and underparts. Crown smeared with ochreous-buff. Shoulders and lesser coverts deep chesnut-maroon, extending faintly in a broken semicircle across the back. Axillaries and under wing leaden-grey. Tibials deep green, some of the feathers being broadly margined with primrose. Centre of the belly also primrose. Under tail-coverts extending to within half an inch of the end of the tail, primrose, washed with cinnamon, and broadly centred with deep green, especially on the more basal feathers. The feathers of the body on their hidden parts leaden-grey, white at roots. Legs and bill as in female. Quills greyish-black, a few of the outer ones edged faintly with greenish, the outer quill being slightly serrated on its outer edge. Outer tertials greyish-black, narrowly edged with green and light yellow; the rest of the tertials the colour of the back. The primary coverts with more or less greyish black, margined with yellow. Tail olivaceous grass-green, stemmed with greyish-black; all the rectrices but the middle pair broadly margined interiorly with greyish-black, and lightly smeared on parts with the same. The rest slightly graduated, the outermost being .5 inch shorter than the centrals. Tail 5 inches long, consisting of fourteen rectrices. Total length of bird 12.5 inches; wing 7.8, the third quill deeply festooned on its inner margin about middle of its length. I cannot find anything in the 'Birds of India' like this Pigeon; and I am not sufficiently acquainted with this group to tell if it has a close affine. It may perhaps be nearly matched from the Philippines.

I have a third species of *Treron* from the Fungshan Mountains, but unfortunately only a single female specimen of it. Its distinctness is marked; and on account of its cry, which the Chinese compare to the *Aw-a* shouting of their ladies to summon the

swinish herds from their rambles about the streets to the troughs to be fed, I name our bird

TRERON CHÆROBOATIS, sp. nov. *which is related to *Phenocercus sororius**

The female has the belly white, the lateral rectrices black tipped with green, the two middle pair somewhat sinuated on the edge of the webs within .75 inch of their tips, and protracted beyond the rest, the longest about .5, the next about .2. It is impossible to guess what the male will be like. The bill of the female bird is a trifle smaller; but otherwise, with the exception of the above-noted differences, she resembles the female of *Treron formosæ*. *sup 406*

On the 27th of January, 1866, from the same mountains was brought to me a Cushat or Wood-Pigeon, which answers in every respect, both of colour and size, to *Palumbus pulchricollis*, Hodgson, of Nepal, as described by Dr. Jerdon (Birds of India, iii. p. 465). I have no specimens from India to compare with mine, and therefore cannot state that it is positively identical, and has not varied at all from isolation. But it is an important fact that in India an allied form, *P. elphinstonii* (Sykes), should occur, and yet that at this distance the species should recur in apparently its entire originality. It adds one more valued addition to the numerous other cases indicating the strong affinity of our mountains with those of the distant Himalayas. The claws of our bird are *yellowish*, and not *yellow* as stated by Dr. Jerdon. The Chinese of the interior call this Pigeon the *Swa Hwun cheaou*, or Hill-Pigeon, and say it only appears when rice is scarce.

I received at the same time with the last quite an immature specimen of a Dove of the *Turtur rupicola* type. If it be, as I take it, identical with this species, we shall learn from it that *T. rupicola* breeds in Formosa, and also that it participates in the peculiar habit of many other Doves, of nesting sometimes in the depth of winter.

From Choloshan (Central Formosa) I have a small Flycatcher, shot in October. It answers in every respect to that figured in Middendorff's 'Sibirische Reise' (plate 17) as *Muscicapa luteola*,

identified by him (page 186) with Pallas's *Motacilla luteola*. Middendorff's single specimen was a male, shot on the 8th of June, and we may therefore suppose it to be in summer plumage. By our bird, which was procured in winter, we see that there is no difference in the plumage of that season. If, then, Middendorff's specimen was truly a male, the species cannot be identified with *M. mugimaki* of the 'Fauna Japonica,' which has the back black and more white on the wing. Neither is it the *Motacilla luteola* of Pallas; for in the 'Zoographia Rosso-Asiatica' (i. p. 470) this species is described "supra cinerea (my bird is olive-green on the upper parts), subtus albida, gula colloque ferrugineis, rectricibus lateralibus medio transversim albis." Pallas never saw the bird, but described it from Messerschmid's notes, and this latter speaks of the species as "chryso-bronchites albicilla." After a careful perusal of the whole of Pallas's article on this subject, I feel convinced he is speaking of the male of *Erythrosterna parva* (L.), which is the western form of *E. leucura* (Gmelin), and is distinguished from it by the greater extent of orange on the throat and breast. The latter appears to be the Chinese race, but both are said to have occurred in India. Pallas's *Motacilla albicilla* (Z. R.-A. i. p. 462) is the winter plumage of one of the two allied forms; but of which, it is difficult to determine. I cannot tell how in the winter-garb the two are to be differentiated. The latest name for our species would seem to be *Muscicapa erythaca*, Blyth. Mr. Blyth tells me that he founded this species on a single specimen procured at Penang. I procured a single specimen some years ago at Amoy, which I described as *M. hylocharis* (Ibis, 1862, p. 305). This had no white at the base of the rectrices. I dissected it, and considered it a male at the time. Von Schrenk (Reise u. Forsch. Amurl. i. p. 2, tab. xiii. fig. 1) figures a young bird having the white in question. Mine may have been a variety, or a female. One with the white was shot by Mr. Gustav Schlegel at Amoy. I do not know where Mr. Blyth published his description of the Penang bird, but I should not be surprised if it proved to be distinct, and that our bird were without a name.

Pallas's *Muscicapa grisola*, var. β , seems identical with *M.*

latirostris, Raffl., of China, and not with my *M. griseisticta*; for Pallas speaks of it as having no spots on the breast, and of *M. albicilla* nearly equalling it in size.

While on the subject of Russian ornithologists, it will be as well to mention that in glancing over Radde's 'Travels in South-east Siberia' I recognized a familiar friend on his Plate X. His *Lusciola cyane* (Pall.) is our *Larvivora gracilis* from Amoy and Tientsin. Unfortunately the Himalaya bird stands as *L. cyana*, Hodgson. Hodgson has named the female *L. brunnea*; but the name is not apt; we must therefore, I suppose, take Dr. Jerdon's name *superciliaris* for the Indian, and preserve Pallas's for the Chinese species. 1867/16

What does Dr. Sclater say to Radde's Plate VIII? Does he consider it to show that his *Turdus naumanni* is identical with *T. ruficollis*?

But I must continue with my Formosan ornithology.

Turdus albiceps, ♀. Skins brought from Central Formosa (Choloshan). Bill and legs brown. Crown deep brown. Feathers at base of culmen, lores, and fore part of eye-streak light buff-brown. Rest of eye-streak, indistinct nuchal band, and under neck white, the latter somewhat spotted, chiefly on the sides, with small black arrow-heads. Cheeks varied with buff and black. Upper parts deep olive-brown, washed on the back with buff. Wings the same; primary coverts tipped with brownish buff, and primaries edged paler. The upper tail-coverts, dorsals, and scapulars faintly barred. Tail deep olive-brown. Underparts as in male, but lighter. Wing 4.25 to 4.3 inches.

Goatsuckers may be seen any evening at this season, skimming about at dusk at the foot of Apes' Hill. I beat out a couple of males from some bushes in my garden on the 19th of January, and shot them both. As I have before only given the female, I will now give

Caprimulgus stictomus, ♂. Length 10 inches; wing 7.5; tail 4.7, of ten feathers; lateral tail-feather about three-tenths shorter than the rest, which are nearly equal. Wing reaches to .8 inch from end of tail. Bill flesh-coloured, apical half blackish

* [The reviewer of Herr Radde's work (Nat. Hist. Rev. 1865, p. 462) considers that author to be wrong in this identification.—ED.]

brown. Skin round eye ochreous. Legs and feet fleshy-brown, whitish on joints and soles; claws black, the comb on central claw whitish. Inside of mouth flesh-coloured. Ear-covert large, nearly as big as the immense eye, which is .4 inch in diameter. First quill about .4 inch shorter than the second, which is .1 shorter than the third and longest. First four quills white about their middle, the spot extending over the inner web only of the first, including the edge of its shaft, running right across the second and third, and occupying the fourth, except on the edges of the outer and inner webs. The two outer tail-feathers on each side pure white, obliquely tipped with brown, more strongly on outer lateral, the margins of both being limned all round with light buff. A large pure white spot occurs on each side of the throat. The male shows this species to have very close affinity with *C. monticolus* of India; and until I have the opportunity to compare ours with the individuals of the same sex of its ally, I shall not be certain of its specific distinctness. It was on the view of a female from Amoy that Mr. Blyth recommended me to separate it.

I have many more jottings in my journal for January 1866, but I fear I have already reached the length of an ordinary article. I must therefore hastily conclude. I am off to the mountains.

Takow, 1 February, 1866.

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XXVI.—*On the Muscicapa melanictera of Gmelin.*

By the Viscount WALDEN, F.L.S., F.Z.S., &c.

423 FORMING part of a large collection of birds recently made in the island of Ceylon by my friend Mr. Spencer Chapman, are three skins of Le Vaillant's "*Cap Nègre*," a species whose correct systematic title has not hitherto been satisfactorily determined. In the hope of being able to refer that species to its oldest specific designation, I trust that a few observations on the subject will not be unacceptable to the readers of 'The Ibis.' Before, however, entering into the history of this bird, I will give a short description, taken from the specimens I have just received.

The entire head, nape, and cheeks intense, yet unglossed,